

WHAT IS CLAIMED IS:

1. An apparatus comprising:

operation inputting means for designating one of a plurality of functions;

function executing means for executing the function designated by said operating inputting means;

measuring means for measuring the time during which each of said functions has been executed by said function executing means; and

chargeable amount computing means for computing a chargeable amount based on the execution time measured by said measuring means regarding each of said functions.

2. An apparatus according to claim 1, wherein said chargeable amount computing means computes said chargeable amount based on the execution time regarding each of said functions and through weighting on a function-by-function basis.

3. An apparatus according to claim 2, wherein said function executing means is controlled by a microprocessor, and wherein said chargeable amount computing means computes said chargeable amount based on the execution time regarding each of said functions and through weighting by a load factor of said microprocessor in effect during execution of each of said functions.

4. An apparatus according to claim 2, wherein said chargeable amount computing means computes said chargeable time based on different weighting factors set for different apparatuses.

5. An apparatus according to claim 1, further comprising:

storing means for storing an accumulated execution time representing a total of execution times measured by said measuring means; and

transmitting means for transmitting said accumulated execution time from said storing means to an external entity for settlement of charges.

6. An apparatus according to claim 1, further comprising:

storing means for storing a chargeable time representing the chargeable amount computed by said chargeable amount computing means; and

transmitting means for transmitting said chargeable time from said storing means to an external entity for settlement of charges.

7. An apparatus according to claim 1, further comprising:

storing means for storing a usable time of said apparatus; and

settling means for subtracting a chargeable time representing the chargeable amount computed by said chargeable amount computing means, from said usable time stored in said storing means.

8. An electronic apparatus comprising:

operation inputting means for designating at least an operating state and a non-operating state;

used time measuring means for measuring duration of said operating state as a used time;

transmitting means for transmitting information about said used time measured by said used time measuring means to an external settlement organ;

settlement date monitoring means for verifying whether a predetermined settlement date is reached;

settlement date notifying means for prompting a user to settle charges when said settlement date monitoring means has verified that said settlement date is reached;

settlement execution monitoring means for verifying whether a predetermined settlement process is executed within a predetermined period of said settlement date; and

controlling means for restricting functions of said electronic apparatus if said settlement execution

monitoring means has found that said predetermined settlement process is not accomplished within said predetermined period.

9. An electronic apparatus comprising:

operation inputting means for designating at least an operating state and a non-operating state;

used time measuring means for measuring duration of said operating state as a used time; and

chargeable time computing means for computing a chargeable time by weighting said used time measured by said used time measuring means in accordance with different weighting factors set for different electronic apparatuses.

10. An electronic apparatus comprising:

input detecting means for detecting a text input;  
and

controlling means for judging said text input detected by said input detecting means, said controlling means further setting said electronic apparatus in a time charging mode depending on a result of the judgment.

11. An electronic apparatus according to claim 10, further comprising storing means for storing a password by which to set said electronic apparatus in said time charging mode, wherein said controlling means sets said

electronic apparatus in said time charging mode when said text input detected by said input detecting means is judged to match the stored password.

12. An electronic apparatus according to claim 11, further comprising:

storing means for storing a usable time of said electronic apparatus;

measuring means for measuring a used time of said electronic apparatus; and

settling means for subtracting said used time from said usable time stored in said storing means;

wherein said measuring means and said settling means function when said controlling means sets said electronic apparatus in said time charging mode.

13. An electronic apparatus comprising:

operation inputting means for designating at least an operating state and a non-operating state;

used time measuring means for measuring duration of said operating state as a used time;

cumulative time measuring means for measuring an accumulated used time measured by said used time measuring means; and

chargeable time computing means for computing a chargeable time by weighting said used time measured by

said used time measuring means in accordance with a weighting factor reflecting said accumulated used time measured by said cumulative time measuring means.

14. An electronic apparatus comprising:

operation inputting means for designating at least an operating state and a non-operating state;

used time measuring means for measuring duration of said operating state as a used time;

chargeable time computing means for computing a chargeable time based on said used time measured by said used time measuring means;

storing means for storing information about a usable time of said electronic apparatus;

settling means for subtracting said chargeable time computed by said chargeable time computing means from said usable time stored in said storing means; and

reading means for reading the usable time information from said storing means in order to notify a user of the information.

15. An electronic apparatus according to claim 14, further comprising notifying means for notifying said user of said usable time based on the information read from said storing means by said reading means.

16. An electronic apparatus according to claim 15,

wherein said notifying means notifies said user of said usable time by giving a usable time display on a display part.

17. A system comprising an electronic apparatus and a managing apparatus for managing said electronic apparatus;

wherein said electronic apparatus measures an actual operating time of said electronic apparatus as a used time, and transmits information about the measured used time and a user identifier applicable to said electronic apparatus to said managing apparatus; and

wherein said managing apparatus manages said user identifier and a settling method corresponding to said user identifier, and settles charges based on the transmitted information about said used time and in accordance with said user identifier.

18. A system according to claim 17, wherein said electronic apparatus transmits an electronic apparatus identifier as said user identifier, and wherein said managing apparatus manages a settling method corresponding to said electronic apparatus identifier and settles changes in accordance with said settling method corresponding to said electronic apparatus identifier.

19. A system according to claim 17, wherein said

managing apparatus measures an accumulated used time of said electronic apparatus identified by said electronic apparatus identifier and, at the time of settlement regarding said electronic apparatus identified by said electronic apparatus identifier, settles charges in accordance with a charging rate weighted by a weighting factor corresponding to said accumulated used time.

20. A system according to claim 17, wherein said electronic apparatus comprises:

operation inputting means for designating any one of a plurality of functions;

function executing means for executing the function designated by said operation inputting means;

used time measuring means for measuring as a used time the time during which each of the functions has been executed by said function executing means;

chargeable time computing means for computing a chargeable time based on said used time measured by said used time measuring means regarding each of said functions;

storing means for storing information about said chargeable time computed by said chargeable time computing means; and

transmitting means for transmitting the chargeable



time information from said storing means to said managing apparatus together with said user identifier; and

wherein said managing apparatus comprises:

managing means for managing said user identifier and a settling method corresponding to said user identifier; and

settling means for settling charges based on said chargeable time information transmitted from said transmitting means and in accordance with said user identifier.

21. A system according to claim 17, wherein said electronic apparatus comprises:

operation inputting means for designating any one of a plurality of functions;

function executing means for executing the function designated by said operation inputting means;

storing means for storing operation information which at least includes execution time information about each of said functions executed by said function executing means; and

transmitting means for transmitting said operation information from said storing means to an external entity for settlement of charges.

22. A system according to claim 17, wherein said

managing apparatus comprises:

notifying means for notifying a user of charges to be settled regarding said used time;

settlement date managing means for managing a date for settling said charges by said user of said electronic apparatus; and

transmitting means which, if a predetermined process for settling said charges is not accomplished within a predetermined period of the settlement date, then transmits over a communication channel restrictive information causing said electronic apparatus to restrict functions thereof;

wherein said electronic apparatus, upon receipt of said restrictive information, has the functions thereof restricted accordingly.

23. A system according to claim 22, wherein said electronic apparatus is disabled upon receipt of said restrictive information.

24. A system according to claim 17, wherein said managing apparatus divides compensation for said used time between an administrative company managing said managing apparatus and a vender that furnishes said electronic apparatus.

25. A charging method comprising the steps of:

measuring a used time regarding each of a plurality of functions provided by an apparatus;

computing a chargeable amount based on said used time measured with respect to each of said functions; and

settling charges based on the computed chargeable amount.

26. A charging method according to claim 25, further comprising the step of computing a chargeable time by weighting the measured used time with regard to each of said functions.

27. A charging method according to claim 26, further comprising the step of computing said chargeable time by weighting said measured used time regarding each of said functions and in accordance with different weighting factors set in advance for different apparatuses.

28. A charging method according to claim 25, further comprising the steps of:

storing a usable time of said apparatus into storing means; and

subtracting a chargeable time representing said computed chargeable amount from said usable time stored in said storing means.

29. A charging method comprising the steps of:

measuring an actual operating time of an apparatus within a chargeable period as a chargeable used time;

measuring an accumulated time of said chargeable used time; and

computing a chargeable time by weighting the measured accumulated chargeable used time in accordance with a weighting factor corresponding to said accumulated time.

30. A charge processing device comprising:

receiving means for receiving information about which of a plurality of functions provided by an apparatus is being executed;

used time measuring means which, based on a result of the reception by said receiving means, measures as a used time the time during which each of said functions has been executed;

chargeable time computing means for computing a chargeable time based on the used time measured by said used time measuring means regarding each of said functions; and

storing means for storing chargeable time information resulting from the computing by said chargeable time computing means.

31. A charge processing device according to claim

30, further comprising transmitting means for transmitting said chargeable time information from said storing means to an external entity for settlement of charges.

32. A storage medium which stores a program capable of controlling a computer, said program comprising the steps of:

measuring an execution time of each of a plurality of functions provided by an electronic apparatus, each function having been input for execution; and

computing a chargeable amount based on the measured execution time regarding each of said functions.

33. A storage medium which stores a program according to claim 32, wherein said program further comprises the step of transmitting said chargeable amount to an external entity for settlement of charges.

34. A prepaid card comprising:

storing means for storing information about a usable time of an electronic apparatus to which said prepaid card is attached; and

updating means for updating information about said usable time by subtracting an actual operating time of said electronic apparatus from the usable information time.

35. An electronic apparatus comprising:  
operation inputting means for designating any one  
of a plurality of functions;  
function executing means for executing the function  
designated by said operation inputting means;  
storing means for storing operation information  
which at least includes information about an execution  
time regarding each of said functions executed by said  
function executing means; and  
transmitting means for transmitting said operation  
information from said storing means to an external entity  
for settlement of charges.

36. A money apparatus made of a flat plate-like  
body incorporating an electronic circuit comprising:  
a memory for storing virtual currency units;  
a communicating part for exchanging data with an  
external entity; and  
a controlling part which stores data received  
through said communicating part into said memory, updates  
said virtual currency units held in said memory in  
accordance with the received data, and transmits the data  
read from said memory to said external entity through  
said communicating part.

37. A money apparatus according to claim 36,

wherein each of said virtual currency units corresponds to a predetermined used time and represents a predetermined amount of money; and

wherein said controlling part computes a used time upon receipt of use start point information and use end point information through said communicating part, converts the computed used time into corresponding virtual currency units, and subtracts said corresponding virtual currency units from the virtual currency units initially held in said memory.

38. A money apparatus selling device for selling a money apparatus, the device comprising:

a loading part into which to load said money apparatus having a memory for storing virtual currency units; a communicating part for exchanging data with an external entity; and a controlling part which stores data received through said communicating part into said memory, updates the virtual currency units held in said memory in accordance with the received data, and transmits the data read from said memory to said external entity through said communicating part;

operating means for inputting virtual currency units desired to be bought;

a display part;

storing means for storing an exchange rate for virtual currency units;

exchange rate displaying means for displaying on a screen of said display part said exchange rate stored in said storing means;

money amount displaying means for acquiring the amount of money corresponding to the virtual currency units desired to be bought in accordance with said exchange rate stored in said storing means, said money amount displaying means further displaying the acquired amount of money on the screen of said display part;

a money inlet port through which bank notes and coins are entered;

money collecting means for counting bank notes and coins entered through said money inlet port, thereby collecting the amount of money displayed on said screen of said display part;

change returning means for returning in change the amount of money left after the collection of money by said money collecting means; and

transmitting means for transmitting information representing the virtual currency units desired to be bought and input by said operating means, to said money apparatus loaded in said loading part.



39. A money apparatus selling device for selling a money apparatus, the device comprising:

a loading part into which to load said money apparatus having a memory for storing virtual currency units; a communicating part for exchanging data with an external entity; and a controlling part which stores data received through said communicating part into said memory, updates the virtual currency units held in said memory in accordance with the received data, and transmits the data read from said memory to said external entity through said communicating part;

a display part;

storing means for storing an exchange rate for virtual currency units;

exchange rate displaying means for displaying on a screen of said display part said exchange rate for virtual currency units;

operating means for inputting virtual currency units desired to be sold;

money amount displaying means for acquiring the amount of money corresponding to the virtual currency units desired to be sold in accordance with said exchange rate stored in storing means, said money amount displaying means further displaying the acquired amount

of money on the screen of said display part;

a money outlet port through which bank notes and coins are output;

money dispensing means for dispensing the amount of money displayed on said screen of said display part; and

transmitting means for transmitting information representing the virtual currency units desired to be sold and input by said operating means, to said money apparatus loaded in said loading part.

40. An exchange rate announcing apparatus for announcing an exchange rate of virtual currency, the apparatus comprising:

collecting means for collecting information about a used time of an electronic apparatus over a network;

exchange rate determining means for determining said exchange rate based on the used time collected by said collecting means as well as on results of comparing the collected used time information with previous used time information; and

announcing means for announcing over said network said exchange rate determined by said exchange rate determining means;

wherein the unit of said virtual currency is constituted by a used time, said virtual currency being

allowed to be converted to an amount of money in accordance with said exchange rate.

41. An exchange rate announcing apparatus according to claim 40, wherein said collecting means collects the number of bought and sold virtual currency units over said network, and wherein said exchange rate determining means determines said exchange rate based on the collected number of bought and sold virtual currency units.

42. An exchange rate announcing method for announcing an exchange rate of virtual currency, the method comprising the steps of:

collecting information about a used time of an electronic apparatus over a network;

determining said exchange rate based on the used time collected by said collecting means as well as on results of comparing the collected used time information with previous used time information; and

announcing over said network said exchange rate determined in said exchange rate determining step;

wherein the unit of said virtual currency is constituted by a used time, said virtual currency being allowed to be converted to an amount of money in accordance with said exchange rate.

43. An exchange rate announcing method according to claim 42, wherein said collecting step collects the number of bought and sold virtual currency units over said network, and wherein said exchange rate determining step determines said exchange rate based on the collected number of bought and sold virtual currency units.